

THE EMBODIMENTS OF THE INVENTION IN WHICH AN EXCLUSIVE PROPERTY OR PRIVILEGE IS CLAIMED ARE DEFINED AS FOLLOWS:

5 1. A method of stabilizing a downhole drilling motor, comprising the steps of:

securing a plurality of vanes to an exterior surface of a stator housing of the drilling motor; and

passing a flow of drilling fluids past the exterior surface of the stator housing between the vanes to create an area of pressure differential and using such pressure differential to protect the stator housing from becoming differentially stuck while drilling.

15 2. A downhole drilling motor, comprising:

a stator housing having an exterior surface with vanes.

3. The downhole drilling motor as defined in Claim 2, wherein the exterior surface has a vane mounting region on which are positioned threads, and the vanes are secured to mounting sleeves, each mounting sleeve having an internal surface on which are positioned threads, the threads of the mounting sleeve being coupled with the threads of the vane mounting region to maintain the vanes in position.